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APPLICATION NO.	FILI	NG DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/771,144	01/26/2001		William Dean Warner	DATUMTE.006A 6196	
20995	7590	08/26/2004		EXAM	IINER
KNOBBE N	MARTENS	S OLSON & 1	ODOM, CURTIS B		
2040 MAIN S FOURTEEN)	ART UNIT	PAPER NUMBER	
IRVINE, CA			2634		

DATE MAILED: 08/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Commons	09/771,144	WARNER ET AL.				
Office Action Summary	Examiner	Art Unit				
	Curtis B. Odom	2634				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
,— .	Responsive to communication(s) filed on <u>26 January 2001</u> .					
closed in accordance with the practice under E	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4)⊠ Claim(s) <u>1-74</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdraw	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6) Claim(s) is/are rejected.	6) Claim(s) is/are rejected.					
7) Claim(s) is/are objected to.	I Commission					
8) Claim(s) <u>1-74</u> are subject to restriction and/or 6	election requirement.					
Application Papers						
9) The specification is objected to by the Examine	r.					
10)☐ The drawing(s) filed on is/are: a)☐ acc		Examiner.				
Applicant may not request that any objection to the						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail D	ate				
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	5)	Patent Application (PTO-152)				
Paper No(s//Waii Date						

Application/Control Number: 09/771,144

Art Unit: 2634

Election/Restrictions

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - Claims 1-23 and 50-55, drawn to a quadrature modulator, classified in class 332, subclass 103.
 - II. Claims 24-46, 64-69, 73, and 74, drawn to gain and phase compensation, classified in class 375, subclass 371.
 - III. Claims 47-49, drawn to a phase shifter, classified in class 331, subclass 135.
 - IV. Claims 56-60 and 71, drawn to a digital filter, classified in class 375, subclass 350.
 - V. Claims 61-63 and 72, drawn to determining a time domain impulse response, classified in class 455, subclass 67.11.
 - VI. Claim 70, drawn to determining a DC offset, classified in class 375, subclass 319.
- 2. The inventions are distinct, each from the other because of the following reasons: Group I refers to a quadrature modulator which produces quadrature modulated signals from baseband signals. Group II refers to a gain and phase compensation apparatus and method which compensates for gain and phase imbalances in a signal. Group III refers to a phase shifter which receives a local oscillator signal and shifts the phase of a signal in response to a control signal. Group IV refers to a digital filter which filters a signal by applying impulse responses to the signal. Group V refers to a method of determining time domain impulse responses. Group VI refers to a method of distinguishing DC offsets produced from a modulator and demodulator.

Page 3

Application/Control Number: 09/771,144

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Art Unit: 2634

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Curtis B. Odom whose telephone number is 703-305-4097. The examiner can normally be reached on Monday- Friday, 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 703-305-4714. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Curtis Odom August 19, 2004

> STEPHEN CHIN SUPERVISORY PATENT EXAMINE: TECHNOLOGY CENTER 2800